

In response to the Office Action of April 9, 2002, please amend the application as follows:

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IN THE CLAIMS

Please cancel claims 1-24, inclusive, without prejudice or disclaimer.

Please add new claims 25-44, inclusive as follows:

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R1  
--25. A process for the preparation of a biological material for the treatment of ulcers, lesions, and diverticula of the digestive and gastrointestinal apparatus, which comprises growing suitable cells on a matrix selected from the group consisting of a non woven fabric matrix and a perforated membrane matrix, comprising at least one hyaluronic acid or a derivative thereof.

2 26. The process according to claim 25, wherein said hyaluronic acid derivatives are hyaluronic acid esters wherein part or all of the carboxy functions are esterified with alcohols of the aliphatic, aromatic, arylaliphatic, cycloaliphatic, heterocyclic series.

3 27. The process according to claim 25, wherein said hyaluronic acid derivatives are the cross-linked esters of hyaluronic acid wherein part or all of the carboxy groups are esterified with the alcoholic functions of the same polysaccharide chain or other chains.

4 28. The process according to claim 25, wherein said hyaluronic acid derivatives are the cross-linked compounds of hyaluronic acid wherein part or all of the carboxy groups are esterified with polyalcohols of the aliphatic, aromatic, arylaliphatic, cycloaliphatic, heterocyclic series, generating cross-linking by means of spacer chains.

5 29. The process according to claim <sup>1</sup>25, wherein said hyaluronic acid derivatives are hemiesters of succinic acid or heavy metal salts of the hemiester of succinic acid with hyaluronic acid or partial or total esters of hyaluronic acid.

6 30. The process according to claim <sup>2</sup>25, wherein said hyaluronic acid derivatives are O-sulphated or N-sulphated hyaluronic acid derivatives.

7 31. The process according to claim <sup>1</sup>25, wherein said hyaluronic acid derivatives are hyaluronic acid amides wherein part or all the free carboxylic groups of hyaluronic acid are reacted with a primary or a secondary amine chosen from the group consisting of the aliphatic, aromatic, arylaliphatic, cycloaliphatic or heterocyclic amine, that can optionally be a pharmaceutically active substance.

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cont.  
8 32. The process according to claim <sup>1</sup>25, wherein said hyaluronic acid derivatives are amides wherein a deacylated amino group of hyaluronic acid or of a hyaluronic acid ester wherein part or all of the carboxy functions are esterified with an alcohol selected from the group consisting of aliphatic, aromatic arylaliphatic, cycloaliphatic and heterocyclic series, is reacted with an acid selected from the group consisting of aliphatic, aromatic, arylaliphatic and cycloaliphatic acid, that can optionally be a pharmaceutically active substance.

33. The process according to claim 25, wherein said cells are selected from the group consisting of mature cells, mesenchimal cells, fibroblasts, epithelial cells and mixtures thereof.

34. A biological material comprising:  
a) intestinal cells optionally together with fibroblasts, mesenchimal cells, mature cells and/or epithelial cells;

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b) a matrix selected from the group consisting of a non woven fabric matrix and a perforated membrane matrix comprising at least one hyaluronic acid derivative as defined in claim 26.

10 35. The process according to claim 25<sup>1</sup>, wherein the hyaluronic acid derivatives are amides wherein a deacylated amino group of hyaluronic acid or of a cross-linked ester of hyaluronic acid wherein part or all of the carboxy groups are esterified with the alcoholic functions of the same polysaccharide chain or other chains, is reacted with an acid selected from the group consisting of aliphatic, aromatic, arylaliphatic and cycloaliphatic acids, that optionally can be a pharmaceutically active substance.

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11 36. The process according to claim 25<sup>1</sup>, wherein the hyaluronic acid derivatives are amides wherein a deacylated amino group of hyaluronic acid or of a cross-linked compound of hyaluronic acid wherein part or all of the carboxy groups are esterified with polyalcohols of the aliphatic, aromatic, arylaliphatic and cycloaliphatic, and heterocyclic series, generating cross-linking by means of spacer chains, is reacted with an acid selected from the group consisting of the aliphatic, aromatic, arylaliphatic and cycloaliphatic acids, that optionally can be a pharmaceutically active substance.

12 37. The process according to claim 25<sup>1</sup>, wherein the hyaluronic acid derivatives are amides wherein a deacylated amino group of hyaluronic acid or of a hemiester of succinic acid or heavy metal salts of the hemiester of succinic acid with hyaluronic acid or partial or total esters of hyaluronic acid, is reacted with an acid selected from the group consisting of aliphatic, aromatic, arylaliphatic and cycloaliphatic acids, that optionally can be a pharmaceutically active substance.

13 38. The process according to claim 25<sup>1</sup>, wherein the hyaluronic acid derivatives are amides wherein a deacylated amino group of hyaluronic acid or of a O-sulphated or N-sulphated hyaluronic acid derivative, is reacted with an acid selected from the group consisting of aliphatic, aromatic, arylaliphatic and cycloaliphatic acids that optionally can be a pharmaceutically active substance.

39. A biological material comprising:

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- a) intestinal cells optionally together with fibroblast, mesenchimal cells, mature cells and/or epithelial cells;
  - b) a matrix selected from the group consisting of a non woven fabric matrix and a perforated membrane matrix comprising at least one hyaluronic acid derivative as defined in claim 27.

40. A biological material comprising:

- B<sup>1</sup>  
cont.
- a) intestinal cells optionally together with fibroblast, mesenchimal cells, mature cells and/or epithelial cells;
  - b) a matrix selected from the group consisting of a non woven fabric matrix and a perforated membrane matrix comprising at least one hyaluronic acid derivative as defined in claim 28.

41. A biological material comprising:

- a) intestinal cells optionally together with fibroblast, mesenchimal cells, mature cells and/or epithelial cells;
- b) a matrix selected from the group consisting of a non woven fabric matrix and a perforated membrane matrix comprising at least one hyaluronic acid derivative as defined in claim 29.

42. A biological material comprising:

- SUB  
C3
- a) intestinal cells optionally together with fibroblast, mesenchimal cells,,  
mature cells and/or epithelial cells;
  - b) a matrix selected from the group consisting of a non woven fabric  
matrix and a perforated membrane matrix comprising at least one hyaluronic acid derivative  
as defined in claim 30.

43. A biological material comprising:

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Cont.
- a) intestinal cells optionally together with fibroblast, mesenchimal cells,  
mature cells and/or epithelial cells;
  - b) a matrix selected from the group consisting of a non woven fabric  
matrix and a perforated membrane matrix comprising at least one hyaluronic acid derivative  
as defined in claim 31.

44. A biological material comprising:

- a) intestinal cells optionally together with fibroblast, mesenchimal cells,  
mature cells and/or epithelial cells;
- b) a matrix selected from the group consisting of a non woven fabric  
matrix and a perforated membrane matrix comprising at least one hyaluronic acid  
derivative as defined in claim 32. ---

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REMARKS

Reconsideration is respectfully requested in view of the foregoing amendments and  
the following remarks. Applicants have endeavored to respond to each of the issues raised